

ABSTRACT:

A method and device for processing analog color signals, comprising:
analog preprocessing (3) sensor output signals to obtain analog preprocessed
signals that cause a reduced amount of digital quantization errors;

converting (5) the analog preprocessed signals into digital signals;

5 reconstructing (7) a first basic color signal (R), a second basic color signal
(G), and a third basic color signal (B) from the digital signals; and

 correcting (9) the basic color signals to obtain standardized signals, in which a
three color signal matrix containing the first, second and third basic color signals (R , G , B)
is multiplied by a correction matrix containing coefficients that depend on the analog
10 preprocessing (3).

 In a first embodiment, the analog preprocessing includes a white balance
adjustment. In a second embodiment, the horizontal sum values of the correction matrix are
adjusted to one for horizontal sum values larger than one, with the analog preprocessing
comprising a corresponding multiplication in the analog preprocessing to ensure to the
15 overall processing multiplication remains the same as in the prior art.

 The invention further relates to a color camera comprising an RGB Bayer
sensor for generating the sensor output signals, and the above-mentioned processing device.

(Fig. 1)